

## **REMARKS/ARGUMENTS**

### **I. General Remarks.**

Applicant respectfully requests that the above amendments be entered and further request reconsideration of the application in view of the following remarks.

### **II. Disposition of the Claims.**

Claims 1-59 are pending. Claims 18-26 and 29-59 were withdrawn from consideration in response to a previous restriction requirement. Claims 27 and 28 have been withdrawn herein. Claims 1, 2, and 5 have been amended herein. Applicant reserves the right to take up prosecution on the claims as filed in an appropriate continuation, continuation-in-part, or divisional application.

All the above amendments are supported by the specification as filed, and are made in a good faith effort to advance the prosecution on the merits of this case. The claims should now be in condition for allowance. Applicant respectfully requests a timely notice of the same.

### **III. Remarks Regarding Claim Objections.**

The Examiner has objected to claims 27 and 28 because “they are directed to a subject matter that is not consistent with the subject matter on which they refer and depend on.” (Office Action at 2.) Applicant has withdrawn claims 27 and 28 from consideration. Accordingly, Applicant respectfully requests the withdrawal of this objection with respect to claims 27 and 28.

### **IV. Remarks Regarding Rejections Under 35 U.S.C. § 112.**

The Examiner has rejected claims 27 and 28 “under 35 U.S.C. [§] 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” (Office Action at 2.) Applicant has withdrawn claims 27 and 28 from consideration. Accordingly, Applicant respectfully requests the withdrawal of this rejection with respect to these claims.

### **V. Remarks Regarding Rejections Under 35 U.S.C. § 102(b).**

The Examiner has rejected claims 1-17 as being anticipated by the commercial material with the trade name “LYTAG.” (Office Action at 3.) Applicant respectfully traverses.

Regarding LYTAG, the Examiner states:

Claim 1: The Bai report describes LYTAG is a lightweight aggregate containing silica and alumina (Bai report, page 79, table 1). The specific gravity of LYTAG is 1.52 (Bai report, p. 79, table 1); All Lytag has a specific gravity from 1.5 to 2.2 ([www.lytag.co.uk](http://www.lytag.co.uk), under 'Health and Safety' section, Physical & Chemical Properties, hard copy of attached). Figure 1 at page 79 of the Bai report shows that LYTAG has a particle distribution of from 5 to 8 US mesh. LYTAG is porous (page 85). LYTAG has spherical shape. See also Lytag brochure, About Lytag. Also see link [www.lytag.co.uk](http://www.lytag.co.uk) under "About Lytag" (hard copy attached).

Claims 2-4: see the Bai report, page 79, table 1.

Claim 5: Lytag is made by pyro-processing fly ash. See the Bai report, page 78, second paragraph. Pyro is a combustion process, and fly ash is a carbonaceous material. See also, [www.lytag.co.uk](http://www.lytag.co.uk) under "Technical" (hard copy attached).

Claim 6: See the Bai report, page 79, figure 1. Also, [www.lytag.co.uk](http://www.lytag.co.uk), under "About Lytag" (hard copy attached).

Claim 7: Lytag has a compressive strength from 20 to 40 N/mm<sup>2</sup>, which is equivalent to 2900 to 5800 psi. See the Bai report, p. 83, last paragraph, last two lines; and figure 3.

Claim 8: Because Lytag is made by sintering fuel ash, its outer layer is vitrified. See [www.lytag.co.uk](http://www.lytag.co.uk), under "Technical" (hard copy attached)

Claims 9-17: See rejections to claims 1-8 above.

(Office Action at 3-4.)

With respect to rejections regarding claims 1-17, Applicant is unclear as to the basis of the Examiner's § 102(b) rejection. In particular, 35 U.S.C. § 102(b) states that "[a] person shall be entitled to a patent unless . . . (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in the this country, *more than one year* prior to the date of application for patent in the United States." 35 U.S.C. § 102(b) (emphasis added). Applicant notes that the present application was filed on July 30, 2003. However, the reference materials used in the Examiner's rejections have a record date thereafter. Specifically, the Bai report was published in 2004, (*See* Notice of References Cited at 1), and the printed Lytag Online Brochure, as attached to the Office Action, was dated March 2004. Both of these materials used in the rejection of claims 1-17 have a print date *after* the filing date of the present application. The Examiner has provided no further evidence to support the assertion that "[c]laims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by the

commercial material with the trade name LYTAG.” (Office Action at 3.) Accordingly, the Applicant respectfully requests withdrawal of this rejection with respect to claims 1-17.

Even if the commercial material with the trade name LYTAG met the requirements to be a prior art reference under § 102(b), it still does not anticipate Applicant’s invention because LYTAG does not meet every element recited in claims 1-17 as required to anticipate the claims under 35 U.S.C. § 102(b). *Manual of Patent Examining Procedure* § 2131 (2004) (hereinafter “MPEP”). In particular, independent claim 1 has been amended to recite that the particulates comprise “an aluminum oxide in an amount less than about 25%.” Independent claim 10 also recites “particulates comprising . . . less than about 25% aluminum oxides.” Rather than disclosing particulates with the recited concentration of aluminum oxide(s), LYTAG teaches the inclusion of 26.3% aluminum oxides. (Bai Report, page 79, table 1.) This decrease in the content of aluminum oxide in the particulates of the present invention, as compared to LYTAG, allows for the formulation of particulates with a desired specific gravity while having a suitable crush resistance for subterranean applications. (Application at ¶ 019.) Therefore, LYTAG does not teach particulates comprising an aluminum oxide in an amount of less than about 25% (claim 1) or particulates comprising less than about 25% aluminum oxides (claim 10). LYTAG thus does not disclose or suggest every element of independent claims 1 and 10.

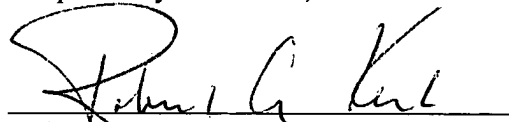
Therefore, independent claims 1 and 10 are not anticipated by LYTAG. The remaining rejected claims depend either directly or indirectly on independent claim 1 or 10. All these dependent claims, which include all the limitations of their corresponding independent claim, are allowable for at least the reasons cited above with respect to independent claims 1 and 10. Accordingly, the Applicant respectfully requests withdrawal of this rejection with respect to claims 1-17.

**SUMMARY**

In light of the above remarks and amendments, Applicant respectfully requests reconsideration and withdrawal of the outstanding objections and rejections. Applicant further submits that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicant believes that no additional fees are due in association with the filing of this response. However, should the Commissioner deem that any additional fees are due, including any fees for extensions of time, Applicant respectfully requests that the Commissioner accept this as a Petition Therefor, and direct that any additional fees be charged to the Deposit Account of Halliburton Energy Services, Inc., No. 08-0300 (Reference Number 2003-IP-010829U1) for any underpayment of fees that may be due in association with this filing.

Respectfully submitted,



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